

### REMARKS

In response to the final Office Action of Paper No. 0208, claims 1, 10-14 and 22-24 are submitted for reconsideration on the basis of the above amendments provided to claim 1 as well as the following remarks. Support for the amendments to claim 1 is found in the specification at page 9 and page 10, first paragraph. Support for the amendments to claim 11 is found at page 6, first paragraph. The remaining claim amendments such as those to claim 12 are provided not to change claim scope but rather to provide better antecedent basis for claim elements consistent with the partially closed transitory phrase usage within the only independent claim, claim 1. As such, it is submitted that no new matter has been added to the application by way of this amendment.

Currently, claims 1, 10-12, 14, 22, and 24 stand rejected under 35 U.S.C. §103(a) over McCabe (US 6,172,114) in view of Greenhaff et al. (US 5,968,900), Cheng (US 6,200,569) and Portman (US 6,051,236). Claims 1, 10-12, 14, and 22 stand rejected under 35 U.S.C. §103(a) over McCabe in view of Portman and optionally Miller et al. (US 6,903,136). Lastly, all of the pending claims stand rejected under 35 U.S.C. §103(a) over Krotzer (US 2001/0008641) in view of Portman.

#### **Remarks Directed to Rejection of Claims 1, 10-12, 22, and 24 under 35 U.S.C. §103(a) over McCabe in view of Greenhaff et al., Cheng and Portman**

Reconsideration of the outstanding rejection is respectfully requested on the basis as detailed below that Cheng teaches away from the prior art reference combination. This teaching away in light of the relative quantities of water-soluble extract of cinnamon and creatine monohydrate and/or creatine magnesium chelate to enhance creatine uptake by muscle are submitted to represent a basis sufficient for the withdrawal of the outstanding rejection.

While the McCabe reference is submitted to teach a supplement of creatine and carbohydrates, specifically ribose, it is devoid of any teaching with respect to a water-soluble extract of cinnamon. Greenhaff et al. is cited for teaching a composition of creatine and carbohydrates. Both McCabe and Greenhaff et al. are submitted to be devoid of teachings with respect to a water-soluble extract of cinnamon. Cheng is cited to bolster these references with respect to this deficiency. Lastly, Portman is cited for teaching a supplement composition containing high levels of carbohydrates as well as the inclusion of a water-soluble extract of cinnamon as a flavoring agent present at a level of between 0.1 and 2 total weight percent. Applicant submits that Portman is devoid of a teaching as to creatine.

The Examiner's attention is directed to Cheng, column 3, lines 17-25, that reads as follows:

The compositions that are employed in this invention [water soluble cinnamon extracts] exhibit an insulin potentiating activity, i.e. they increase apparent insulin activity as measured by increased glucose uptake by cells. Improved insulin activity leads to decreased circulating insulin, which leads to lower blood glucose and lower glycosylated hemoglobin levels in patients; it also has an effect on smoothing out fluctuations in glucose levels. (Emphasis added).

As such, Applicant respectfully submits that Cheng teaches that a water-soluble extract of cinnamon per the pending claims decreases circulating (blood plasma) concentration of insulin. Thus, the action of a water-soluble cinnamon extract per Cheng is submitted to be at cross purposes to the teachings of Greenhaff et al. Greenhaff et al., to reiterate, teaches the desirability of increasing blood plasma creatine concentration and causing a "substantially simultaneous increase in blood plasma insulin concentration." In this regard, Greenhaff et al. is consistent with the prior art detailed in the instant specification on page 5 with respect to a study by Stengee

et al. indicating that high insulin levels are necessary to enhance muscle creatine accumulation. As a result, Applicant submits that one of ordinary skill in the art would be disinclined to include a water-soluble cinnamon extract according to the pending claims as this ingredient in reducing blood insulin levels would actually be expected to decrease muscular creatine absorption. It is respectfully submitted that McCabe in lacking a disclosure relevant to water-soluble cinnamon extract fails to remedy the incompatibility of Cheng and Greenhaff et al. detailed above. Additionally, Portman et al., while teaching a water-soluble cinnamon extract, is devoid of a teaching as to creatine and likewise fails to remedy the incompatibility of the teachings of Greenhaff et al. and Cheng of the outstanding prior art reference combination rejection.

In light of the above amendments and remarks, claim 1, the only independent claim, is submitted to be nonobvious over the prior art reference combination. Applicant submits that additional bases exist for the allowability of the subject matter of the remaining dependent claims, separate from dependency from claim 1. Applicant reserves the right to make these remarks of record in due course of prosecution.

Additionally, the essentially closed nature of the pending claims to include essentially only water-soluble cinnamon extract, creatine monohydrate and/or creatine magnesium chelate and optionally at least one carbohydrate is critical in the interpretation of the prior art. As Portman et al. conveys to one of ordinary skill in the art the necessity of major constituents in a dietary supplement beyond a water-soluble cinnamon extract, creatine monohydrate and/or creatine magnesium chelate and at least one carbohydrate, it is respectfully submitted that the pending claims in being limited essentially to these three elements renders Protman et al. inapplicable as prior art.

In light of the above amendments and remarks, reconsideration and withdrawal of the rejection as to claims 1, 10-12, 22 and 24 under 35 U.S.C. §103(a) over McCabe in view of Greenhaff et al., Cheng and Portman is respectfully requested.

**Remarks Directed to Rejection of Claims 1, 10-12, and 22 under  
35 U.S.C. §103(a) over McCabe in View of Portman and Optionally Miller et al.**

McCabe is cited for teaching the composition of a creatine monohydrate in combination with a carbohydrate. McCabe is noted as lacking a teaching relevant to a water-soluble cinnamon extract with specific carbohydrates per dependent claim 10. To bolster these limitations of McCabe, Portman is cited for teaching a nutritional supplement composition supporting a high glycemic energy source and a water-soluble cinnamon extract as a flavoring agent. (Paper No. 0208, pages 4-5).

Miller et al. is cited as necessary for the teaching of a nutritional dietary supplement inclusive of creatine monohydrate, a water-soluble extract of cinnamon, and one or more carbohydrates. (Paper No. 0208, page 5, last full paragraph).

The basis of the rejection is Miller has been noted as qualifying as a reference only under 35 U.S.C. §102(e).

As an initial matter, Applicant submits that Miller et al. is not prior art in the context of a rejection under 35 U.S.C. §103(a) as Miller et al. was commonly owned at the time of invention of the pending application and as such disqualified as prior art under 35 U.S.C. §103(c).

With the disqualification of Miller et al. as prior art, Applicant respectfully submits that one of ordinary skill in the art at the time the claimed invention was made would not have made such a combination on the basis of known properties of water-soluble cinnamon extracts to lower blood plasma insulin levels while such carbohydrates are administered for exactly the opposite

purpose of specifically increasing blood plasma insulin levels and thereby induce creatine uptake by muscle tissue.

As a person of ordinary skill in the art is presumed to have known the relevant art at the time of the invention, the attributes of a water-soluble cinnamon extract (as for example detailed in Cheng – already of record) would be known to the person of ordinary skill in the art as well as studies of Stengée et al. cited in the instant specification at page 5 indicating the importance of increasing blood plasma insulin levels to enhance creatine absorption by muscle tissue. With knowledge of the relevant prior art, it is submitted that one of ordinary skill in the art would be dissuaded from making the combination of McCabe and Portman et al. The fact that neither McCabe nor Portman et al. details the mechanism of creatine absorption by muscle tissue is submitted to not detract from Applicant's position since one of ordinary skill in the art is imparted with such knowledge. (Examination guidelines for determining obviousness under 35 U.S.C. §103 in view of the Supreme Court decision in *KSR International Co. v. Teleflex Inc.*, Federal Register, volume 72, No. 195, page 57528, columns 1-2).

As pending independent claim 1 requires, in essentially closed form the inclusion of a water-soluble cinnamon extract, creatine monohydrate and/or creatine magnesium chelate in an optional carbohydrate with the water-soluble extract of cinnamon functioning synergistically and contrary to the teachings of the prior art with the creatine substances to increase creatine uptake by muscle by an insulin dependent pathway and the water-soluble extract of cinnamon decreases glucose intolerance, Applicant submits that claim 1 and those claims that depend therefrom are nonobvious over the prior art of record. Additionally, the essentially closed nature of the pending claims is submitted to preclude reliance on Portman in the prior art reference combination as major constituents in a dietary supplement beyond a water-soluble cinnamon extract, creatine

monohydrate and/or creatine magnesium chelate and at least one carbohydrate per the pending claim are required per Portman et al.

In light of the above amendments and remarks, reconsideration and withdrawal of the rejection as to claims 1, 10-12, 22 and 24 over McCabe in view of Portman et al. and if necessary Miller et al. is respectfully requested.

**Remarks Directed to Rejection of Claims 1, 10-12, 22 and 24  
under 35 U.S.C. §103(a) over Krotzer in view of Portman**

Krotzer is cited for teaching a nutritional supplement inclusive of creatine monohydrate, cinnamon, and glucose or maltose. While Krotzer is noted as not expressly teaching the inclusion of a water-soluble cinnamon extract, a logical argument is provided that cinnamon in a beverage would inherently leach water-soluble cinnamon extract. (Paper No. 0208, page 7, last paragraph).

Portman et al. is cited as noted above for the teaching of a water-soluble cinnamon extract as a flavoring agent. The basis of the rejection is therefore that one of ordinary skill in the art at the time the invention was made would have simply modified Krotzer in terms of concentration to yield the claimed invention or alternatively combine with the flavoring agent of Portman et al. (Paper No. 0208, paragraph spanning pages 8-9).

Applicant respectfully submits that the essentially closed nature of the pending claims to include essentially only water-soluble cinnamon extract, creatine monohydrate and/or creatine magnesium chelate and optionally at least one carbohydrate is critical in the interpretation of the prior art. As Krotzer, Portman et al. and the combination thereof all convey to one of ordinary skill in the art the necessity of major constituents in a dietary supplement beyond a water-soluble cinnamon extract, creatine monohydrate and/or creatine magnesium chelate and at least one

carbohydrate, it is respectfully submitted that the pending claims in being limited essentially to these three elements are entitled to patentable weight.

Additionally, Krotzer while using cinnamon itself and not a water-soluble extract is admitted to form a water-soluble extract as part of a beverage composition and nonetheless retains large quantities of nonwater-soluble cinnamon debris that is specifically excluded from the claimed invention. With reference to the water extraction examples of Cheng, one of ordinary skill in the art would expect the water-soluble extract of cinnamon to be only in the range of 1 to 30 milligrams of water-soluble cinnamon extract per gram of powdered cinnamon. Krotzer is silent as the quantity of powdered cinnamon need to induce short term psychological feedback, and as such the quantity limitations as to water-soluble extract of cinnamon is entitled to patentable weight.

In light of the above amendments and remarks, reconsideration and withdrawal of the rejection as to claims 1, 10-12, 22 and 24 under 35 U.S.C. §103(a) over Krotzer in view of Portman et al. is requested.

Summary

Claims 1, 10-12, 22 and 24 are pending in the application. Withdrawal of the outstanding rejections and the passing of the application to allowance are thereby requested.

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Respectfully submitted,

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